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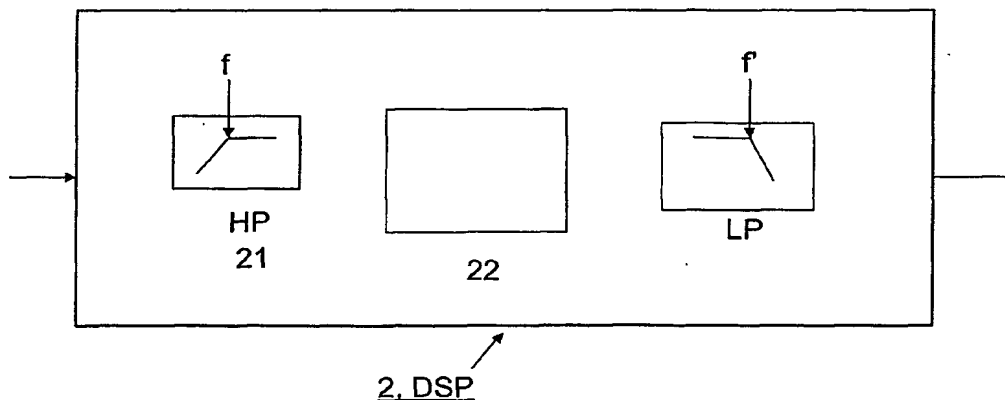
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(54) Title: **SYSTEM AND METHOD FOR AUDIO SIGNAL PROCESSING**



(57) Abstract: A sound reproduction system comprises a digital audio signal input (1), a digital audio signal processor (2, DSP) and a digital audio signal output (1) wherein the digital signal processor (2, DSP) comprises a high pass filter (21) with a pass frequency (f) of between first and a second frequency, e.g. between 300 Hz and 2 kHz, a compression amplifier (22) for compression and amplification of a signal to within a signal amplitude range and a clipper for clipping the signal above a clipping level, and preferably a low pass filter (23) for filtering the signal provided by the compressing amplifier and for providing an output signal, the pass frequency of the low pass filter (f) lying in the range 2 kHz-Fs/2 where Fs is the sampling frequency. 10 Fs/2 may be e.g. 4 kHz. The parameters of the various elements such as cut-off frequency, order of the pass filter, gain, etc are preferably dependent on a measured noise level.



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